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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,156	10/16/2003	Rick L. Adkins	PO-7934/MD-02-75	7891

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EXAMINER

SERGEANT, RABON A

ART UNIT PAPER NUMBER

1711

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,156

Applicant(s)

ADKINS ET AL.

Examiner

Rabon Sergeant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-53 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 32-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-17 and 19-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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1. Claims 11-17 and 19-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Adequate support has not been provided for claiming that the diluent is used in an amount of at least about 60 percent by weight. Applicants have stated that Table 1 on page 41 provides support for the amendment; however, the table only specifies that isopropanol was used in an amount of 60.0 percent by weight. Since the Table only discloses 60 percent by weight of isopropanol, no evidence has been set forth to establish that applicants were in possession at the time of filing of the full range of weight percent content encompassed by the claims and that applicants had established at the time of filing that the claimed range could be used with diluents other than isopropanol.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 11-17, 19, and 22-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Preston et al. ('271 or '947) or Yu ('358).

Patentees disclose addition products of unsaturated polyols containing alkenyl aryl constituents and ethylenically unsaturated monomers, such as styrene, acrylonitrile, and mixtures thereof, wherein the unsaturated polyols have structures that meet those of applicants. Patentees additionally disclose free-radical polymerization initiators and further disclose that the addition polymerization may occur in the presence of polyol diluents (Preston et al.) or solvents such as benzene (Yu). The disclosed quantities of diluents are considered to fall within applicants' claimed range, since relatively large quantities are disclosed. See abstract, columns 2-5, and examples within Preston et al. ('271). See abstract and columns 2-7 within Preston et al. ('947). See abstract, columns 3-12, and examples within Yu. Given the disclosure of mixtures of the ethylenically unsaturated monomers, the preferred use of styrene and acrylonitrile, the examples, and the breadth of applicants' ratio range for the monomers, the position is taken that one would have clearly envisaged the ratio of claims 15 and 26 from patentees' disclosures.

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4. Applicants have essentially argued that the references are directed to macromers, the preparation of polymer polyols, and polymer dispersants prepared from the macromers, and, therefore, fail to anticipate the claimed pre-formed stabilizers. In response, for the aforementioned reasons, the references are considered to adequately disclose applicants' claimed, required components (1) through (4) in a manner sufficient to anticipate the claims. Regardless of what name applicants attach to the respective compositions, no evidence is seen to be present that distinguishes the compositions. Applicants' remarks are insufficient to establish that the preamble breathes life into the claims. In summation, applicants' remarks present no compelling rationale or evidence that justify removal of the prior art rejections.
5. Claims 11-17, 19, and 22-29 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 87/03886.

The reference discloses addition products of unsaturated monols or polyols and ethylenically unsaturated monomers, such as styrene, acrylonitrile, and mixtures thereof, suitable for use as dispersants for polymer-polyols, wherein the unsaturated monols or polyols have structures that meet those of applicants. The reference discloses such structures at page 6, lines 18-20 and 42-44, wherein phenylene linkages are disclosed as being preferred for the R^3 variable of the structure. The reference further discloses that the addition polymerization may occur in the presence of monols and polyols and chain transfer agents. See pages 11-13 and 15-17.

6. Applicants have essentially argued that the examples disclose the use of polyols (diluent) in quantities below the claimed quantity of at least about 60 percent by weight and, therefore, the reference fails to anticipate the claims. In response, the teachings of the reference are not limited to its examples, and it is noted that quantities of polyols that inherently function

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as diluents are disclosed at page 13, lines 34+; page 16, lines 35+; and page 17, lines 1-6, wherein these quantities meet applicants' claimed range. Accordingly, applicants' arguments are insufficient to overcome the prior art rejection.

7. Claims 11-17, 19, 21, 22-29, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Holeschovsky et al. ('731).

Holeschovsky et al. disclose at column 7, lines 28-30 that the stabilizers of WO 87/03886 may be produced using low intrinsic unsaturation polyether polyols, that correspond to those of claims 21 and 31. WO 87/03886 has been discussed within paragraphs 5 and 6 of this Office action.

8. Applicants have argued that the compositions of the reference are different than those of the presently claimed invention in view of the different stabilizer precursors used therein. In response, applicants have not adequately elaborated on these alleged differences and have failed to specifically indicate how the instant claims are distinguished from the compositions of the reference. Furthermore, it is noted that arguments pertaining to unexpected or superior results are immaterial with respect to overcoming an anticipation rejection.

9. Claims 20, 21, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 87/03886 in view of Holeschovsky et al. ('731).

As aforementioned, the primary reference discloses addition products of unsaturated monols or polyols and ethylenically unsaturated monomers, such as styrene, acrylonitrile, and mixtures thereof, suitable for use as dispersants for polymer-polyols, wherein the unsaturated monols or polyols have structures that meet those of applicants. The reference discloses such structures at page 6, lines 18-20 and 42-44, wherein phenylene linkages are disclosed as being

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preferred for the R^3 variable of the structure. The reference further discloses that the addition polymerization may occur in the presence of monols and polyols and chain transfer agents. See pages 11 and 12.

10. The primary reference is silent with respect to applicants' specific alcohols of claims 20 and 30 and the specific polyol of claims 21 and 31. With respect to the specifically claimed alcohols, the position is taken that it would have been obvious to utilize any alcohol, such as those claimed, that would have been expected to be miscible with the base polyol, as suggested at page 11 of the primary reference. With respect to the specifically claimed polyol of claims 21 and 31, the position is taken that it was known at the time of invention to produce stabilizers having induced unsaturation from low intrinsic unsaturation polyols. See abstract of Holeschovsky et al. Holeschovsky et al. specifically disclose the stabilizers of WO 87/03886 at column 3 of the reference and the use of low unsaturation polyether polyols to produce such polymer polyol stabilizers at columns 3-7, especially column 7, lines 28-30. In view of this teaching, it would have been obvious to produce the stabilizer of WO 87/03886 using low unsaturation polypropylene polyols.

11. Applicants' response has been considered; however, it is insufficient to overcome the prior art rejection. Applicants argued deficiencies with respect to WO 87/03886 and Holeschovsky et al. have been previously addressed within paragraphs 5-8. Furthermore, applicants' arguments pertaining to showings of unexpected results are deficient for the following reasons. Firstly, the argued showings are not commensurate in scope with the claims in terms of species of components or quantities of components. It has been held that the claims must be commensurate in scope with any showing of unexpected results. *In re Greenfield*, 197

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USPQ 227. It has further been held that a limited showing of criticality is insufficient to support a broadly claimed range. *In re Lemin*, 161 USPQ 288. Additionally, the comparative showing is not representative of the relied upon teaching of the prior art, and it is not seen that the argued comparative example of the instant specification employs the argued TMI reactant. Accordingly, the prior art rejection has been maintained for the reasons of record.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent
November 2, 2006


RABON SERGENT
PRIMARY EXAMINER